

U.S. Pat. App. Ser. No. 10/550,083
Attorney Docket No. 10191/3760
Supplemental/Replacement Appeal Brief

[10191/3760]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

March Theisen et al.

For: METHOD FOR TRIGGERING
RESTRAINT DEVICES

Filed: August 11, 2006

Serial No.: 10/550,083

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
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**SUPPLEMENTAL/REPLACEMENT APPEAL BRIEF
PURSUANT TO 37 C.F.R. § 41.37**

SIR:

In the above-identified patent application ("the present application"), the Final Office Action of November 26, 2008 included final rejections of claims 5 to 14. Appellants filed a Notice Of Appeal on April 27, 2009 from the Final Office Action, so that the two-month appeal brief due date was June 29, 2009 (since June 27, 2009 is a Saturday).

The Appeal Brief was filed on June 29, 2009. A Notice of Non-compliance was mailed on August 6, 2009, so that the one-month response date is September 8, 2009 (since September 6, 2009 was a Sunday and since September 7, 2009 was a federal holiday)).

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It is understood for purposes of the appeal that any Amendments to date have already been entered by the Examiner, and that the Response After Final does not require entry since it included no amendments.

The previously filed Appeal Brief filed on June 29, 2009 in support of the appeal of the final rejections of claims 5 to 14 was deemed non-compliant in the Notification of Non-Compliant Appeal Brief (37 CFR 41.37) of August 6, 2009.

In the Notification: it was stated as to item 5 that: "The brief does not contain a concise statement of each ground of rejection presented for revise", and that the "103(a) rejection of claims 5 to 10 listed in the grounds of rejection to be reviewed on appeal is not consistent with the 102(b) rejection of claims 5 to 10 in the arguments section".

The Grounds of Rejection to Be Reviewed On Appeal has been fixed as to B, so that this issue is "Whether claims 5 to 10 are anticipated under 35 U.S.C. § 102(b) by U.S. Pat. No. 5,497,327 ("Takaya")".

The Replacement Appeal Brief is believed to comply with all the requirements of Rule 41.37, and to address the issues raised in Notice.

As to the length of the "concise explanation" of the subject matter defined in each of the claims involved in the appeal (see 41.37), the "concise explanation" language is like the "concise explanation" requirement of former Rule 37 CFR 1.192. Accordingly, the length of the concise explanation provided is therefore acceptable, since it would have been acceptable under 37 CFR 1.192 and since it specifically defines the subject matter of the independent claims involved in the appeal. In the filing of many appeal briefs for the present Assignee, the length of the final "concise explanation" has always been finally accepted by the Patent Office.

It is therefore respectfully submitted that this Appeal Brief complies with 37 § C.F.R. 41.37.

It is respectfully submitted that the final rejections of claims 5 to 14 should be reversed for the reasons explained below.

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1. REAL PARTY IN INTEREST

The real party in interest in the present appeal is Robert Bosch GmbH (“Robert Bosch”) of Stuttgart in the Federal Republic of Germany. Robert Bosch is the assignee of the entire right, title and interest in the present application.

2. RELATED APPEALS AND INTERFERENCES

There are no interferences or other appeals related to the present application, which “will directly affect or be directly affected by or have a bearing on the Board’s decision in the pending appeal”.

3. STATUS OF CLAIMS

CLAIMS 1 to 4 ARE CANCELED.

A. Claims 5 and 11 to 14 were rejected under the first paragraph 35 U.S.C. § 112, as to the enablement requirement.

B. Claims 5 to 10 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Pat. No. 5,497,327 (“Takaya”).

C. Claim 11 to 14 was rejected under 35 U.S.C. § 103(a) as unpatentable over the Takay reference.

Appellants therefore appeal from the final rejections of pending and considered claims 5 to 14. A copy of all of the pending and considered and appealed claims 5 to 14 is attached hereto in the Claims Appendix.

4. STATUS OF AMENDMENTS

In response to the Final Office Action mailed on November 26, 2008, Appellants filed a response (without any claim amendment) (it was mailed on February 13, 2009).

It is understood for purposes of the appeal that any Amendments to date have already been entered by the Examiner.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The concise explanation of the summary of the claimed subject matter is as follows, as described in the context of the present application.

As to independent claim 5 (and respectively dependent claims 6 to 10), its claimed subject matter is described as follows in the present application:

The presently claimed subject matter of claim 5 is to a method for triggering a restraint device, and includes features of triggering the restraint device as a function of a collision signal; and initiating the triggering when the collision signal exceeds a noise threshold at a triggering time, in which a calculated time required for the collision signal to exceed the noise threshold is taken into account in determining the triggering time for the restraint device, and in which the calculated time is calculated as a function of a collision velocity.

As to the presently claimed subject matter of claim 5, it is directed to a method for triggering restraint devices according to the species defined in the independent claim. (See Substitute Specification, page 1, lines 2 to 3).

The method for triggering a restraint device includes *triggering the restraint device as a function of a collision signal*. Conventionally, a restraint device is triggered only when a collision signal, as a function of which the restraint devices are triggered, exceeds this noise threshold. (See *id.* lines 6 to 8). In contrast, claim 5 provides for triggering restraint devices that takes into account the time that has passed before the noise threshold of the restraint device is exceeded, but beginning with the collision. (See *id.* at lines 11 to 25). *The collision signal may be an acceleration signal, a pressure signal, a temperature signal or another signal from a deformation sensor or even a velocity signal.* (See *id.* at lines 25 to 26).

The method for triggering a restraint device further includes *initiating the triggering when the collision signal exceeds a noise threshold at a triggering time*. In claim 5, the triggering of restraint devices takes into account the time that has passed before the noise

threshold of the restraint device is exceeded, but beginning with the collision. (See id. at lines 11 to 25).

Claim 5 also provides that *a calculated time is required for the collision signal to exceed the noise threshold is taken into account in determining the triggering time for the restraint device*. The time between the collision and the exceeding of the noise threshold is taken into account in terms of a fixed time value, which is taken into account in the determination of the triggering times for the various restraint devices. (See id. lines 28 to 30). The duration may also be determined until the noise threshold is exceeded as a function of the velocity. (See id. at page 2, lines 4 to 5).

Claim 5 also provides that *the calculated time is calculated as a function of a collision velocity*. The duration may be determined until the noise threshold is exceeded as a function of the velocity, and the collision velocity may be used for this purpose. (See id. at lines 4 to 5). This allows for a adaptively controlling this time between the collision and the exceeding of the noise threshold. Finally, the method of claim 5 more precisely determines the suitable triggering times for the individual restraint devices. (See id. at lines 5 to 12).

Figure 1 shows the correlation between collision velocity and triggering time. Figure 3 shows a second diagram of the correlation between collision velocity and triggering time that takes into account a fixed time shift. Figure 4 shows a third diagram of the correlation between collision velocity and triggering time that takes into account a collision velocity to provide for an adaptive determination of the time between the contact and the exceeding of the noise threshold. The collision velocity is used since it determines the time between contact and the exceeding of the noise threshold for the particular vehicle. (See id. at page 4, lines 21 to 27 and 32 to 34).

As to claims 11 and 12 to 14, they are described as follows in the present application:

The presently claimed subject matter of claims 11 and 12 to 14 include the subject matter of claim 5 and further provide that *the calculated time is an offset of the triggering time, where the offset is inversely proportional to the collision velocity.* (See id., at page 4, line 32 to page 5, line 1; and Fig. 4).

In summary, the presently claimed subject matter of claim 5 is to a method for triggering a restraint device and includes the features of triggering the restraint device as a function of a collision signal; and initiating the triggering when the collision signal exceeds a noise threshold at a triggering time, in which a calculated time required for the collision signal to exceed the noise threshold is taken into account in determining the triggering time for the restraint device, and in which the calculated time is calculated as a function of a collision velocity. (See claim 5).

As to dependent claim 11 (which depends from claim 5), this claim further provides that the calculated time is an offset of the triggering time, the offset being inversely proportional to the collision velocity. (See claim 11).

Finally, the appealed claims include no means-plus-function or step-plus-function claims, so that 41.37(v) is satisfied as to its specific requirements for such claims, since none are present here. The present application does not contain any step-plus-function claims because the method claims in the present application are not “step plus function” claims because they do not recite “a step for”, as required by the Federal Circuit and as stated in Section 2181 of the MPEP.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Whether claims 5 and 11 to 14 are enabled under the first paragraph of 35 U.S.C. § 112.
- B. Whether claims 5 to 10 are anticipated under 35 U.S.C. § 102(b) by U.S. Pat. No. 5,497,327 (“Takaya”).
- C. Whether claims 11 to 14 are unpatentable under 35 U.S.C. § 103(a) over the Takaya reference.

7. ARGUMENT

A. The Enablement Rejections Under 35 U.S.C. § 112, ¶ 1 Of Claims 5 and 11 to 14

Claim 5

Claim 5 was rejected under the first paragraph of 35 U.S.C. § 112 as to the enablement requirement. In particular, the Office conclusorily asserted that the feature in which “the calculated time is calculated as a function of a collision velocity”, as provided for in the context of claim 5, is not enabled.

The present application explicitly discloses that feature of “determin[ing] the duration until the noise threshold is exceeded as a function of the velocity”, and that the “collision velocity is used for this purpose.” (See Substitute Specification, page 2, lines 4 to 5). The specification further discloses that the collision velocity may be advantageously determined by a pre-crash sensory system, for example with video, ultrasound, radar or lidar. (See *id.* at lines 11 to 13). The specification further discloses the collision velocity determines the time between contact and the exceeding of the noise threshold for the particular vehicle. (See *id.* at page 4, lines 22 to 28). The presently claimed subject matter therefore determines the calculated time, and the *collision velocity*. Therefore, a person skilled in the art would be able to calculate the calculated time as a function of a collision velocity based the present application and its disclosures.

Therefore, the enablement rejection of claim 5 must be reversed.

Claims 11 to 14

Claims 11 to 14 were rejected under the first paragraph of 35 U.S.C. § 112, as to the enablement requirement. In particular, the Final Office Action conclusorily asserts that the claims do not disclose the features of “an offset” that is “inversely proportional to the collision velocity,” as provided for in the context of claims 11 to 14.

The present application provides full support for the features of “an offset” that is “inversely proportional to the collision velocity,” as provided for in the context of claims 11 to 14. (See Fig. 4; and Substitute Specification, page 4, line 25 to page 5, line 8). For

example, Fig. 4 and its corresponding description plainly disclose an adaptive determination of time between contact and the exceeding of the noise threshold accounted for offsets (6.5ms at 20 km/h, 5.6 ms at 5.6 km/h, and 4.9 ms at 40km/h). A person skilled in the art would be able to understand and use the feature in which the offset is “inversely proportional to the collision velocity”, since the specification shows the higher the collision velocity, the smaller the offset.

Therefore, the enablement rejections of claims 11 to 14 must be reversed.

Also in this regard, it is respectfully submitted that the Final Office Action's assertions simply do not reflect the standard for determining whether a patent application complies with the enablement requirement that the specification describe how to make and use the invention — which is defined by the claims. (See M.P.E.P. § 2164). The Supreme Court established the appropriate standard as whether any experimentation for practicing the invention was undue or unreasonable. (See M.P.E.P. § 2164.01 (citing Mineral Separation v. Hyde, 242 U.S. 261, 270 (1916); In re Wands, 858 F.2d. 731, 737, 8 U.S.P.Q.2d 1400, 1404 (Fed Cir. 1988))). Thus, the enablement test is “whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.” (See id. (citing United States v. Electronics, Inc., 857 F.2d 778, 785, 8 U.S.P.Q.2d 1217, 1223 (Fed. Cir. 1988))).

The Federal Circuit has made clear that there are many factors to be considered in determining whether a specification satisfies the enablement requirement, and that these factors include but are not limited to the following: the breadth of the claims; the nature of the invention; the state of the prior art; the level of ordinary skill; the level of predictability in the art; the amount of direction provided by the inventor; the existence of working examples; and the quantity of experimentation needed to make or use the invention based on the disclosure. (See id. (citing In re Wands, 858 F.2d at 737, 8 U.S.P.Q.2d at 1404 and 1407)). In this regard, the Federal Circuit has also stated that it is “improper to conclude that a disclosure is not enabling based on an analysis of only one of the above factors,” and that the Office's analysis must therefore “consider all the evidence related to each of these factors” so

that any nonenablement conclusion “must be based on the evidence as a whole.” (See M.P.E.P. § 2164.01).

Also, the Office bears the initial burden of establishing why the “scope of protection provided by a claim is not adequately enabled by the disclosure.” (See *id.* (citing *In re Wright*, 999 F.2d 1557, 1562, 27 U.S.P.Q.2d 1510, 1513 (Fed. Cir. 1993))). Accordingly, a specification that teaches the manner and process of making and using an invention in terms that correspond in scope to those used in describing and defining the claimed subject matter complies with the enablement requirement. (See *id.*).

In contrast to the above, however, the Final Office Action's unsupported assertions simply do not concern — as they must under the law — whether the present application enables a person having ordinary skill in the art to practice the claimed subject matter of the claims without undue experimentation — which it plainly does, as evidenced, for example, by the above reference to the present application. In short, the Final Office Action's assertions are merely conclusory and do not address the issue of whether one having ordinary skill would have to unduly experiment to practice the claimed subject matter of the rejected claims — a proposition for which the Office bears the burden of proving a *prima facie* case as to the rejected claims.

In this regard, to properly establish enablement or non-enablement, the Office must make use of proper evidence, sound scientific reasoning and the established law. In the case of *Ex Parte Reese*, 40 U.S.P.Q.2d 1221 (Bd. Pat. App. & Int. 1996), a patent examiner rejected (under the first paragraph of section 112) application claims because they were based on an assertedly non-enabling disclosure, and was promptly reversed because the rejection was based only on the examiner's subjective belief that the specification was not enabling as to the claims. In particular, the examiner's subjective belief was simply not supported by any “evidence or sound scientific reasoning” and therefore ignored recent case law — which makes plain that an examiner (and not an applicant) bears the burden of persuasion on an enablement rejection.

More particularly, the examiner in *Ex parte Reese* was reversed because the rejection had only been based on a conclusory statement that the specification did not contain a sufficiently explicit disclosure to enable a person to practice the claimed invention without

exercising undue experimentation — which the Board found to be merely a conclusory statement that only reflected the subjective and unsupported beliefs of a particular examiner and that was not supported by any proper evidence, facts or scientific reasoning. (See id.).

Moreover, the Board made clear that it is “incumbent upon the Patent Office . . . to back up assertions of its own with acceptable evidence,” and also made clear that “[where an] examiner's 'Response to Argument' is not supported by evidence, facts or sound scientific reasoning, [then an] examiner has not established a *prima facie* case of lack of enablement under 35 U.S.C. § 112, first paragraph.” (See id. at 1222 & 1223; italics in original). In the present case, the Office Action has not even alleged in a conclusory way that undue experimentation would be required. Moreover, even as to the assertions as presented, the present application plainly discloses how to use the subject matter of the rejected claims, as discussed above.

In view of all of the foregoing, it is plain that the Final Office Action's assertions simply do not satisfy the judicial standards discussed above with respect to the enablement requirement since the arguments and assertions presented do not relate the scope of the claim to the specification to determine whether the specification is enabling, nor do they properly address the enablement factors. It is therefore respectfully submitted that the Office has not even established a *prima facie* case as to the enablement requirement.

Therefore, the rejections of claims 5 and 11 to 14 under the first paragraph of 35 U.S.C. § 112 must be reversed.

**B. The Rejections Under 35 U.S.C. § 102(b)
That Claims 5 to 10 Are Anticipated**

Claims 5 to 10

Claims 5 to 10 were rejected under 35 U.S.C. § 102(b) as anticipated by the Takaya reference.

To reject a claim under 35 U.S.C. § 102, the Office must demonstrate that each and every claim feature is identically described or contained in a single prior art reference. (See *Scripps Clinic & Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991)). Still further, not only must each of the claim features be identically described, an

anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed invention, namely the claimed subject matter of the claims, as discussed herein. (See Akzo, N.V. v. U.S.I.T.C., 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986)).

As further regards the anticipation rejection, to the extent that the Office may be relying on the inherency doctrine, it is respectfully submitted that to rely on inherency, the Office must provide a “basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics necessarily flows from the teachings of the applied art.” (See M.P.E.P. § 2112; emphasis in original; and see *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int'l. 1990)). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic. Accordingly, it is respectfully submitted that any anticipation rejection premised on the inherency doctrine is not sustainable absent the foregoing conditions.

Claim 5, as presented, is to a method for triggering a restraint device which includes the features of triggering the restraint device as a function of a collision signal and initiating the triggering when the collision signal exceeds a noise threshold *at a triggering time* in which *calculated time* required for the collision signal to exceed the noise threshold is taken into account in determining the triggering time for the restraint device, *in which the calculated time is calculated as a function of a collision velocity*.

As to the Takaya reference (Abstract, column 3, lines 7 to 41; column 5, line 4 to column 6, line 3; and Figures 1, 6 and 7), it does not disclose the features as provided for in the context of claim 5. In particular, as regards the claim feature in which “*the calculated time is calculated as a function of a collision velocity*”, the deceleration signal (g) is NOT “proportional to a vehicle collision velocity,” as conclusorily in the Final Office Action. As understood by a person in the art and as clearly defined in dictionaries or textbooks, deceleration (or acceleration) is “the rate of change of velocity with respect to time” or broadly “change of velocity,” (see Merriam-Webster’s Collegiate Dictionary, Eleventh Edition). Deceleration is understood to relate to the change of velocity (in a decreasing way) - and *not to the value of the velocity*. Moreover, the specification of the present application (page 3, paragraphs 1 and 2) specifically discloses that velocity is the integrated acceleration

signal (that is, the acceleration signal is the change of velocity -- as understood by a person skilled in the art).

Therefore, there is simply no support for the assertion that “[a]cceleration or deceleration is proportional to a vehicle velocity.” In short, a deceleration signal (g) does not identically disclose the feature of “a collision velocity”, as provided for in the context of claim 5.

The Final Office Action also conclusorily asserts that the specification of the present application (page 3, paragraphs 1 and 2) supports the alleged “physical law” – acceleration or deceleration signals are proportional to a vehicle velocity. The cited paragraphs of the specification simply do not say this. The first paragraph (of page 3 of Substitute Specification) referred to by the Office plainly states that:

In systems for the calculation of triggering times for restraint systems, a threshold function is used which is compared to a signal derived from an acceleration signal. *This signal may be the acceleration signal itself, or else the integrated acceleration signal, i.e. the velocity signal.* 3:2-4.

The present application therefore plainly distinguishes the acceleration signal from the velocity signal. (See also Substitute Specification, page 1, lines 25 to 26 (“The collision signal may be an acceleration signal, a pressure signal, a temperature signal or another signal from a deformation sensor or even a velocity signal.”)). Further, the first paragraph referred to by the Office plainly states that the velocity signal is the integrated acceleration signal – rather than proportional to the acceleration signal as conclusorily asserted by the Final Office Action.

Moreover, any reading of the Takaya reference makes plain that it does not concern velocity -- let alone a collision velocity, for calculating its operating time (FT). Indeed, the “Takaya” reference does not even refer to the word “velocity.” Within the cited portion of the “Takaya” reference, the time (duration) is timed during a deceleration process until an integrated value exceeds a threshold value (see the Abstract of the Takaya reference and Figure 7). This is wholly different than the calculated time required for the collision signal to exceed a noise threshold, in which the calculated time is calculated based on a function of a collision velocity, as provided for in the context of the claimed subject matter.

As regards the “triggering time” feature of claim 5, the operating timing (FT) in the cited reference does not identically disclose (or even suggest) the triggering time (accounted for a calculated time required for a collision signal to exceed a noise threshold), which is a time point at which the collision signal is checked to determine if the collision signal indeed exceeds the noise threshold, at which point the collision signal may exceed the noise threshold. When the collision signal exceeds the noise threshold at the triggering time, the triggering of a restraint device is initiated.

In stark contrast, the operating time (FT) in the Takaya reference relates to an operation time calculated until an integrated value (S) exceeds a threshold value (S_0) (see the Takaya reference, Figures 7 and 8; Abstract; and column 5, line 51 to column 6, line 11). This does not identically disclose (or even suggest) the feature of a triggering time at which the collision signal is checked against the noise threshold. Indeed, the operating time (FT) is determined only after the integrated value exceeds a threshold value, which is wholly different than the triggering time at which the collision signal is checked to determine whether it exceeds the noise threshold.

Accordingly, claim 5, as presented, is allowable, as are its dependent claims 6 to 10. The anticipation rejections must therefore be reversed.

**C. The Obviousness Rejections
Under 35 U.S.C. § 103
Of Claims 11 to 14**

Claims 11 to 14

Claims 11 to 14 were rejected under 35 U.S.C. § 103(a) as unpatentable over the Takaya reference alone.

As regards the obviousness rejections of claims 11 to 14, to reject a claim under 35 U.S.C. § 103(a), the Office bears the initial burden of presenting a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish *prima facie* obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the

claimed combination must be found in the prior art and not based on the application disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Also, as clearly indicated by the Supreme Court in *KSR*, it is “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *See KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007). In this regard, the Supreme Court further noted that “rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.*, at 1396. Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim features. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

Still further, M.P.E.P. 2143.01 IV makes it clear that *merely stating that the claimed subject matter is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish prima facie obviousness*.

First, claims 11 to 14 depend from claim 5, as presented, and are therefore allowable for essentially the same reasons as claim 5, as presented.

Second, the Final Office Action simply does not present any support for a *prima facie* case of obviousness as required by M.P.E.P. 2143.01 IV with respect to claims 11 to 14. Each of claims 11 to 14 includes the feature in which “the calculated time is an offset of the triggering time, the offset being inversely proportional to the collision velocity.” The Final Office Action did not specify any part of the Takaya reference that corresponds to the above highlighted feature. Instead, it conclusorily asserted that claims 11 to 14 are obvious since the Takaya reference (Abstract and col. 6, lines 12 to 19) is concerned with “implementing an offset constant decided by experiment.” This assertion simply does not explain how the Takaya reference discloses the offset is inversely proportional to the collision velocity as provided for in the context of claim 11. Therefore, this conclusory assertion simply does not satisfy the initial burden of the Office in presenting a *prima facie* case of obviousness as required by the M.P.E.P. and as clearly indicated by the *KSR* Supreme Court.

Therefore, the obviousness rejections of claims 11 to 14 must be reversed.

As further regards each of the obviousness rejections, it is respectfully submitted that the cases of In re Fine, supra, and In re Jones, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992), make plain that the Office's generalized assertions that it would have been obvious to modify or combine the references do not properly support a § 103 rejection. It is respectfully submitted that those cases make plain that the Office Action reflects a subjective "obvious to try" standard, and therefore does not reflect the proper evidence to support an obviousness rejection based on the references relied upon. In particular, the Court in the case of In re Fine stated that:

The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. This it has not done. . . .

Instead, the Examiner relies on hindsight in reaching his obviousness determination. . . . One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

In re Fine, 5 U.S.P.Q.2d at 1598 to 1600 (citations omitted; italics in original; emphasis added). Likewise, the Court in the case of In re Jones stated that:

Before the PTO may combine the disclosures of two or more prior art references in order to establish *prima facie* obviousness, there must be some suggestion for doing so, found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. . . .

Conspicuously missing from this record is any evidence, other than the PTO's speculation (if it be called evidence) that one of ordinary skill . . . would have been motivated to make the modifications . . . necessary to arrive at the claimed [invention].

In re Jones, 21 U.S.P.Q.2d at 1943, 1944 (citations omitted; italics in original).

That is exactly the case here since it is believed and respectfully submitted that the Office Actions to date and the Advisory Action offer no evidence whatsoever, but only

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conclusory hindsight, reconstruction and speculation, which these cases have indicated does not constitute evidence that will support a proper obviousness finding. Unsupported assertions are not evidence as to why a person having ordinary skill in the art would be motivated to modify or combine references to provide the claimed subject matter of the claims to address the problems met thereby. Accordingly, the Office must provide proper evidence of a motivation for modifying or combining the references to provide the claimed subject matter.

Also, the Federal Circuit in the case of In re Kotzab has made plain that even if a claim concerns a “technologically simple concept” — which is not the case here — there still must be some finding as to the “specific understanding or principle within the knowledge of a skilled artisan” that would motivate a person having no knowledge of the claimed subject matter to “make the combination in the manner claimed,” stating that:

In this case, the Examiner and the Board fell into the hindsight trap. The idea of a single sensor controlling multiple valves, as opposed to multiple sensors controlling multiple valves, is a technologically simple concept. With this simple concept in mind, the Patent and Trademark Office found prior art statements that in the abstract appeared to suggest the claimed limitation. But, there was no finding as to the specific understanding or principle within the knowledge of a skilled artisan that would have motivated one with no knowledge of Kotzab's invention to make the combination in the manner claimed. In light of our holding of the absence of a motivation to combine the teachings in Evans, we conclude that the Board did not make out a proper prima facie case of obviousness in rejecting [the] claims . . . under 35 U.S.C. Section 103(a) over Evans.

In re Kotzab, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000) (emphasis added). Here again, there have been no such findings to establish that the features discussed above of the rejected claims are met by the reference relied upon. As referred to above, any review of the reference, whether taken alone or combined, makes plain that the reference simply does not describe the features discussed above of the rejected claims.

Thus, the proper evidence of obviousness must show why there is a suggestion as to the reference so as to provide the subject matter of the claimed subject matter and its benefits.

In short, there is no evidence that the reference relied upon, whether taken alone or otherwise, would provide the features of the claims discussed above. It is therefore respectfully submitted that the claims are allowable for these reasons.

As still further regards all of the obviousness rejections of the claims, it is respectfully submitted that not even a *prima facie* case has been made in the present case for obviousness, since the Office Actions to date and the Advisory Action never made any findings, such as, for example, regarding in any way whatsoever what a person having ordinary skill in the art would have been at the time the claimed subject matter of the present application was made. (See *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1455 (Fed. Cir. 1998) (the “factual predicates underlying” a *prima facie* “obviousness determination include the scope and content of the prior art, the differences between the prior art and the claimed invention, and the level of ordinary skill in the art”)).

It is respectfully submitted that the proper test for showing obviousness is what the “combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art”, and that the Patent Office must provide particular findings in this regard — the evidence for which does not include “broad conclusory statements standing alone”. (See *In re Kotzab*, 55 U.S.P.Q. 2d 1313, 1317 (Fed. Cir. 2000) (citing *In re Dembicza*k, 50 U.S.P.Q.2d 1614, 1618 (Fed. Cir. 1999) (obviousness rejections reversed where no findings were made “concerning the identification of the relevant art”, the “level of ordinary skill in the art” or “the nature of the problem to be solved”))). It is respectfully submitted that there has been no such showings by the Office Actions to date or by the Advisory Action.

In fact, the present lack of any of the required factual findings forces both Appellants and this Board to resort to unwarranted speculation to ascertain exactly what facts underly the present obviousness rejections. The law mandates that the allocation of the proof burdens requires that the Patent Office provide the factual basis for rejecting a patent application under 35 U.S.C. § 103. (See *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788

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(Fed. Cir. 1984) (citing *In re Warner*, 379 F.2d 1011, 1016, 154 U.S.P.Q. 173, 177 (C.C.P.A. 1967))). In short, the Examiner bears the initial burden of presenting a proper prima facie unpatentability case — which has not been met in the present case. (See *In re Oetiker*, 977 F.2d 1443, 1445, 24, U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992)).

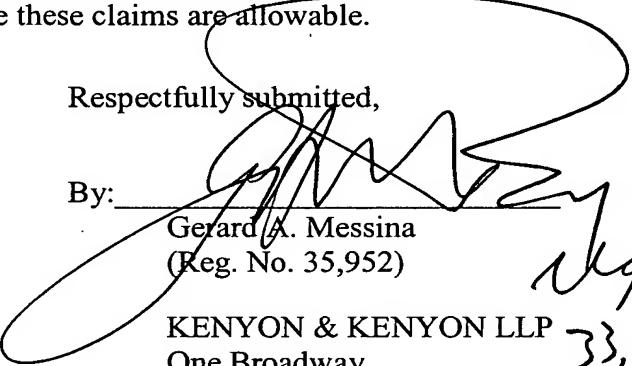
Accordingly, claims 5 to 14 are allowable for the foregoing reasons.

CONCLUSION

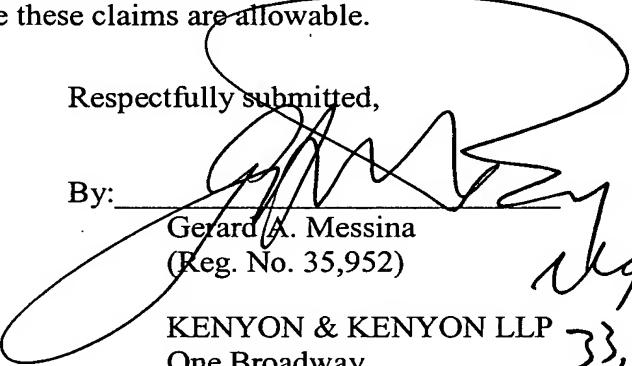
In view of the above, it is respectfully requested that the rejections of the finally rejected claims 5 to 14 be reversed since these claims are allowable.

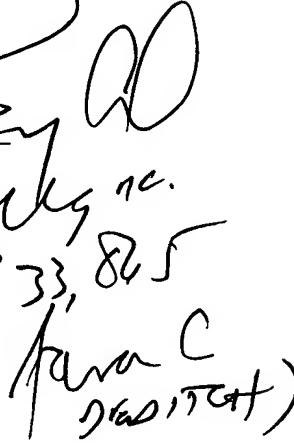
Dated: 9/8/2005

Respectfully submitted,

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CUSTOMER NO. 26646

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CLAIMS APPENDIX

1-4. (Canceled).

5. (Previously Presented) A method for triggering a restraint device, comprising:
triggering the restraint device as a function of a collision signal; and
initiating the triggering when the collision signal exceeds a noise threshold at a
triggering time, wherein a calculated time required for the collision signal to exceed the noise
threshold is taken into account in determining the triggering time for the restraint device,
wherein the calculated time is calculated as a function of a collision velocity.

6. (Previously Presented) The method as recited in Claim 5, wherein the triggering time is
taken into account by a fixed offset.

7. (Previously Presented) The method as recited in Claim 5, further comprising:
determining the triggering time as a function of the collision velocity and a crash type.

8. (Previously Presented) The method as recited in Claim 7, further comprising:
determining the collision velocity via a pre-crash sensor.

9. (Previously Presented) The method as recited in Claim 7, further comprising:
determining the triggering time as a function of the collision velocity and the crash
type, wherein the triggering time is taken into account by a fixed offset.

10. (Previously Presented) The method as recited in Claim 9, further comprising:
determining the collision velocity via a pre-crash sensor.

11. (Previously Presented) The method as recited in claim 5, wherein the calculated time is an
offset of the triggering time, the offset being inversely proportional to the collision velocity.

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12. (Previously Presented) The method as recited in claim 7, wherein the calculated time is an offset of the triggering time, the offset being inversely proportional to the collision velocity.

13. (Previously Presented) The method as recited in claim 9, wherein the calculated time is an offset of the triggering time, the offset being inversely proportional to the collision velocity.

14. (Previously Presented) The method as recited in claim 10, wherein the calculated time is an offset of the triggering time, the offset being inversely proportional to the collision velocity.

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EVIDENCE APPENDIX

Appellants have not submitted any evidence pursuant to 37 CFR Sections 1.130, 1.131 or 1.132, and do not rely upon evidence entered by the Examiner.

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RELATED PROCEEDINGS INDEX

There are no interferences or other appeals related to the present application.